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ABSTRACT

A study was made to find out the average amount of time that teachers in South Bend, Indiana spent designing audiovisual aids and to determine their awareness of the availability of audiovisual production classes. A questionnaire was sent to 30% of the teachers of grades 1-6 asking the amount of time they normally spent producing audiovisual materials. A check list was also sent to indicate usage. Three questions were then asked concerning the audiovisual classes that were offered to the teachers. All completed surveys were scored as a test on computer answer sheets and sent to Indiana University for analysis. It was found that the teachers spent time outside of the classroom preparing aids even during the summer months. Teachers in the lower grades spent more time doing production than those in the upper grades. Over 60% of the teachers were aware of the production classes offered, but few had taken advantage of the classes. Statistical results as derived by the computer print out sheets are presented in seven tables. A copy of the questionnaire, responses to the questions, and grade distribution of teachers are appended. (DS)

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A STUDY OF TEACHER PREPARED CLASSROOM AUDIO AND VISUAL MATERIALS AND COURSES AVAILABLE TO SOUTH BEND AREA TEACHERS IN AUDIOVISUAL PRODUCTION

by

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E. L. Sayles

TABLE OF CONTENTS

Chapter		Page
I	STATEMENT OF THE PROBLEM AND DESIGN OF THE STUDY	1
	The Problem	2
	Underlying assumptions	2
	Importance of the study	2
	Definition of Terms Used	3
	Limitations of the Study	5
	Design and Rationale	5
	Instrumentation	6
	Methodology	8
	Identification of the population	8
	Mailing the questionnaire	10
	Follow-up technique	10
	Organization of the Remainder of the Study	11
II	REVIEW OF RELATED LITERATURE	12
	Background on Audiovisual material development	12
	Possible reasons for use of audiovisual materials in a classroom	12
	Levels of audiovisual production	13
	Categories of audiovisual materials and equipment	14
	Types of projection machines	15
III	FINDINGS OF THE STUDY	18
	Mail returns	18
	Findings of items 1 thru 9	19
	Findings of item 10	20
	Findings of items 11 thru 18	21
	Findings of items 19 thru 24	22
	Findings of items 25 thru 32	23
IV	SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS	25
	Summary	25
	The problem	25
	Methodology	25

Findings 26
Conclusions 28
Recommendations for further study 29

BIBLIOGRAPHY 31

APPENDIXES 33

Appendix A Cover letter and questionnaire . . 33
Appendix B Comments to Item 9 38
Appendix C Comments to Item 10A 39
Appendix D Comments about Audiovisual productions and instruction 40
Appendix E Number of questionnaires returned listed by grade level 43

LIST OF TABLES

TABLE		PAGE
1.	The number of respondents chosen per number of grade 1 to 6 teachers in a building	9
2.	Random population size chosen listed by grade	11
3.	List of non-projected materials produced and percent by grade of respondents that have used them	20
4.	Percentages by grade of time spent weekly in normal aid production	21
5.	Percentages by grade of teachers responding yes to the use of listed machines	21
6.	Total percents of respondents knowing of production courses available and possible enrollment dates if interested in the class	22
7.	Percent of respondents, by grade and over all, knowing of and having receiving assistance from Instructional Coordinators of the SBCSC	24

Chapter I

STATEMENT OF THE PROBLEM AND DESIGN OF THE STUDY

After World War II, the use of films in group instruction became prominent. Other forms of audio and visual aids came into popular use. The text book is by far the oldest teaching aide known, and many educators still consider it the best visual aid. However, with technological advancements and changes, teachers have found it necessary to get away from strictly "teaching by the book". Students learn by doing, and what students do will greatly determine what they will learn. Research has shown that effective interrelationships of audiovisual media can contribute to increased learning. The secret ingredient to success is not in how often or how many media are used, rather in how correlated they are with the subject being taught.

Many audio and visual classroom aids can be purchased from educational production companies, but such aids can be expensive. Many times aids are prepared by the teacher to avoid these high costs and to better meet the needs of the individual child or class. Much of this preparation is done outside the classroom. There are instructional classes offered to teachers in the South Bend area in how to produce such materials.

The Problem

This study is designed to find out 1) the approximate amounts of time teachers of various grade levels in the South Bend Community School Corporation (S.B.C.S.C.) spend on these aids, and 2) how many teachers know of the instructional classes available to them in South Bend.

Underlying assumptions. The following statements are predictions for the outcome of this study. This researcher believes these statements to be true of the teachers in the S.B.C.S.C.

1. Teachers produce the majority of their own teaching aids outside the classroom.

2. Teachers of upper grade (specifically for this study grades 4, 5, 6) children use less time preparing aids than do lower grade teachers (specifically for this study grades 1, 2, 3).

3. The majority of the area teachers do not know about the instructional classes in audiovisual material production available to them in South Bend.

4. The majority of the area teachers are not aware of the S.B.C.S.C. Instructional Coordinators and the services the Coordinators can offer them.

Importance of the study. The results of this study can indicate to the Instructional Coordinators the extent to which their services have been used by the teaching population selected for this study.

Those involved with the audiovisual production classes can benefit from this study through indications of whether area teachers have knowledge of the classes available to them, and some predictions may be made about possible future class enrollments.

Definition of Terms Used

Several terms and phrases are used repeatedly in this study. These terms should be interpreted as follows:

Audiovisual Aid. Any device by means of which the learning process may be encouraged or carried on through the senses of hearing and/or sight. (Good:23)* For the purpose of this paper this term will be interchanged with audiovisual materials (to mean the same thing.).

Audiovisual Education. A broad term to describe all education based on the use of materials (other than books) that appeal directly to the sense of hearing and sight such as charts, models, still, motion, and sound pictures, tape recorders, etc. (Good:50)

Closed Form Questions. Responses are made to a set of provided answers. The information that is desired may be more easily counted, tabulated, and analyzed. (Best:44)

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*Names and citations in parenthesis refer to the bibliography; numbers after the colon are page numbers.

Coordinators... a person responsible for the coordination of various curricular offerings either within a single school or between schools in a school district, county school office or state department of education; comparable to a supervisor, but with emphasis on voluntary cooperation and mutual sharing of ideas and plans. (Good:139)

Inservice Classes. Voluntary after school instruction offered to S.B.C.S.C. teachers in various curricular and curricular related activities. Credits are offered to participants and are accumulative toward increments in the participating teachers yearly salary.

Open Form Questions. The respondent gives free and spontaneous expressions when answering a question. The response is either verbal or (for the purpose of this study) space as provided for written reply.

Production. This term will be used interchangably with to design, to assemble, to make, to develop or to prepare.

Random Sampling. A sample arbitrarily selected in such a way as to guarantee equal probability of selection to all possible samples of this size that could be formed from the members of the universal involved. (Good:506)

Respondent. Anyone receiving and replying to the survey. This term will be used interchangably with teacher and the pronoun she.

Questionnaire. A list of planned, written questions related to a particular topic, with space provided for indicating the response to each question, intended for submission to a number of persons for reply, commonly used in survey studies and in the measure of attitudes, and opinions. (Good:435). The terms instrument and survey will be interchanged with questionnaire (to mean the same).

Special Note - I shall refer to myself as "this researcher", "the writer" or "the designer" throughout this paper.

Limitations of the Study

This study will be concerned with only the teachers of grades 1 through 6 in the S.B.C.S.C. A random sampling of this population will be taken to include 30% of each elementary school's teaching staff in this grade range.

Design and Rationale

A cover letter and questionnaire were designed, and then printed by the Indiana University at South Bend campus (I.U.S.B.) duplicating center to be mailed through the S.B.C.S.C. inter-school mail system. A set of three items was assembled by this researcher for each prospective respondent. The set included:

1. The cover letter - a 8x11 printed page which expressed the purpose of the questionnaire, the importance of the reply, the designers name and teaching status, as

well as the approval signature of Mr. Howard Uhrig - Audiovisual Coordinator S.B.C.S.C.

2. The questionnaire - an 8x14" printed page both front and back, containing 32 items.

3. A self addressed envelope - for use in returning the survey to this researcher.

The majority of the questions asked were in closed form. The open form questions used were to allow the teacher the opportunity to name audiovisual (AV) materials produced other than the ones listed on the instrument, to name of which AV aid required the most preparation time, to describe assistance received by special area coordinators in the S.B.C.S.C., and to offer comments and suggestions concerning AV material production and professional instruction for production.

It was stated that a copy of the survey results would be mailed to the respondent if the appropriate section was marked and the mailing label stapled to the end of the survey was self addressed.

Instrumentation

The first two questions on the instrument established the grade level (1 to 6) and type of teaching situation (i.e. self contained - one teacher, open classroom - one teacher) of the respondent. It was believed that in situations with more than one teacher, less time would be used in AV aid preparation. These questions also laid the

foundation for establishing the differences, if any, between grade levels taught and the time spent in production.

A limited list of non-projected materials (such as picture files, learning centers, and overhead transparentcies) that would be commonly available in all classrooms was given. The respondent was asked to check any aids that she personally produced or collected materials for. Space was given for the teacher to add any other aids she wanted to include.

A time sequence in hours and approximate days was given. The respondent was asked how much time she normally spent weekly producing AV materials. To help categorize answers, the teacher was asked to check one of the five given time choices.

A list of eight projected AV equipment (such as film strip machines, 16mm projector, slide projector, etc.) was offered and the teacher was asked to check any she has used.

The next three questions involved the AV production classes offered at I.U.S.B. (F400/500) and the Inservice class sponsored by the S.B.C.S.C. It was asked if the respondent had knowledge of the class, had taken the class, had no knowledge of the class, and whether she may or may not consider taking the class. If a positive response was given toward taking both or either class, a schedule of possible semester sessions within the 1976-1977 year was listed for the teacher to indicate a preference. The results of these questions will be sent to Mrs. Grace Blanding at I.U.S.B.

and Mr. Howard Uhrig at the S.B.C.S.C. It is hoped that this information will give them some general insight on how informed the area teachers are about these classes and what possibilities they might expect for the next year's class enrollments.

An alphabetical list of instructional areas that pertain to elementary classes, and the Instructional Coordinator's name was given. The respondent was asked to check yes or no to any coordinator from whom she had requested assistance. The respondent was directed to comment on the type of assistance received, if any, beside the person's name. It was assumed that the majority of the respondents would not be aware of most of the coordinators listed and would not have requested service.

The last item on the survey gave the respondent an opportunity to offer comments on or suggestions about teacher produced AV aids, and about production classes offered area teachers.

Methodology

Identification of the population. Using the 1975-1976 S.B.C.S.C. Directory, each of the 33 schools to be used in this study was assigned a number to be used in coding respondents surveys. Some examples of the school codes are as follows; Ardmore School coded 01, Greene School coded 03, and Maple Lane coded 20. Within each building,

each teacher was likewise assigned a number code. The first 1st grade teacher listed was given 00 and sequenced numbers of 01, 02, 03... were given until all teachers in that building were coded. This procedure was done in each school building separately. No numbers were carried over to another group of teachers in a different school.

To determine how many teachers per building would constitute the 30% limit to be used in this study, the total number of teachers of grades 1-6 in that building was changed to a decimal figure and then multiplied by .30. Table I shows the number of chosen respondents per number of grade 1-6 teachers in a school. A minimum of 2 respondents per building was pre-set.

TABLE I

The number of respondents chosen per number of grade 1-6 teachers in each school building.

Number of teachers grades 1-6	Number of Respondents Chosen
1 - 8	2
9 - 11	3
12 - 15	4
16 - 18	5
19 - 21	6
22 - 25	7
26 - 28	8

Once the number of respondents per building had been set, the next step was to determine exactly which teachers would be used in this random sampling. In accordance with the definition of random sampling as stated earlier in this

chapter, the Rand Corp. book A Million Random Digits with 100,000 Normal Deviates (pg. 34, 35) was used. This researcher coupled two consecutive digits together beginning arbitrarity on page 34 and continued through page 35. Working through one building at a time, each pair of numbers matching an assigned teacher code was circled, and that teacher's name and code was underlined in the Directory. This procedure continued until the predetermined number of teachers for that building had been reached. This system for randomization was done for each respondent involved.

Using a blue felt tipped thin line pen, each instrument was marked with school and teacher code in the space designated for office use only.

Mailing the questionnaire. A total of 140 questionnaires were mailed. Table 2 shows the range of grade and number distribution used for this project. Permission was received to use the S.B.C.S.C. inter-school mail system to send the survey, and receive the data envelopes containing the cover letter, coded instrument, and an envelope self-addressed to this researcher were prepared. The outside envelope was addressed to the prospective respondent including name (as listed in the Directory), grade taught and name of respondents school.

Follow up. A period of about 2 weeks lapsed before a second letter and instrument were mailed to those who had not replied. A little note, hand written by this designer,

was included on each cover letter saying the respondents survey had not been received. A green thin line felt tipped pen was used to code the follow-up instruments and to address the envelopes. Sixty-three follow-up surveys were mailed. Appendix E shows the number of returned questionnaires compared to Table 2.

TABLE 2

Randomized population selected listed by grade.

Grade Taught	Randomized Sample Population
1	26
2	20
1-2	1
3	19
4	18
3-4	1
5	32
4-5	1
6	22
Total	140

Organization of Remainder of the Study

Chapter II has a review of some literature related to audiovisual materials and education. Chapter III contains the findings of the questionnaire. Chapter IV discusses conclusions, a summary, and suggestions for further study.

Chapter II

REVIEW OF RELATED LITERATURE

Audiovisual aids came into prominence with the development of 16mm motion picture film, at first silent and then with sound, in the 1920 and 1930's. (Kemp:3). Films proved invaluable during W. W. II in military training. Seeing to improvements in teaching techniques that could be made, a number of educational film companies began producing quantities of films for classroom uses.

Stimulating and motivating students requires a variety of environmental changes. Learning occurs at its highest rate when the greatest number of senses are stimulated and involved. When stated very simply, there are 3 basic steps to learning. They are 1) experience, 2) understanding and 3) thinking. (DeKieffer and Cochran:3) AV education can help provide the experiences to enhance understanding and stimulate thinking.

Possible reasons for using AV aids instead of or in supplement to textbook teaching are numerous. This writer will only attempt to mention a few that may be commonly felt among teachers of grades 1 to 6. AV aids may be used to stimulate interest, to provide a basis for development in learning, to offer experiences that might not otherwise be experienced, as well as to motivate and inspire active

participation. AV education is not a good substitute for actual teaching. It should be used to correlate bits of information from various sources, to develop a unit of study, to follow up or summarize a unit, and to add variety to the lesson. There are several advantages of AV education over strict book studies. They have a greater chance of appealing to students of all interest and ability levels and they may make things visually and auditorily clear. It can give needed reinforcement in special areas and can assist students and teachers in the formation of order, and continuity of thought.

Interchangable terms such as teaching aids, communication media, instructional and educational materials as well as AV materials are in popular use in recent years. Teaching aids are on the educational market but are very often expensive. Many teachers prefer to produce their own materials to save costs and to better meet the current needs of their students. There are 3 levels of AV production. They will be listed and briefly described.

Level 1. Mechanical level - Preparation.
At this level little planning is required and actual preparation follows some established procedure. This level can be illustrated by mounting a picture on cardboard or construction paper, or making a copy for a transparency.

Level 2. Creative level - Production.
These materials require planning and decisions. The production of a series of slides, a set of transparencies or the creation of an instructional unit using pictures are examples of this level.

Level 3. Design level - Conception.
In this highest level of production, materials are conceived within a carefully planned and designed framework for individual or group use. At this level specific instructional objectives are met as part of a design for instruction.

Once AV materials and equipment have been purchased or produced, they can be placed into 3 major categories.

1. Non-projected Materials.
These would include charts, graphs, bulletin and chalk boards, field trips, exhibits, and flat pictures. The bulletin-board can suppliment any academic area, and it can allow teacher and student the opportunity for self-expression through displayed materials. Flat or still pictures can be valuable in translating words into meaningful symbols, to correct mistaken impressions, to enrich, and even to stir emotions about the subject.

2. Projected materials and equipment.
Filmstrips and film strip machines, slides and slide projectors, transparentcies and opaque projectors would go in this category. However, there are 3 major types of projection systems.

a) direct projection - this is the most commonly used. Light passes directly from the projection bulb, through the condenser lenses, through the material, through the objective lens and on to the screen. A slide projector would be a good example of direct projection.

b) indirect projection - an example of this would be a transparentcy projector. Materials are placed on a flat platform. With an indirect light source and using mirrors, the material can be projected not far from the machine or at a distance.

c) reflected projection - this is used only in the opaque projector. Despite its awkward size, with the use of specially angled mirrors and condenser lenses, projected pages directly from books or magazines are reflected in a

large mirror immediately above the object through a large objective lens to the screen.

3. Audio materials.

In this category are record players and records, tapes, tape recorders, tape players, and radios. The first practical recording devise is credited to Thomas Edison in 1877. His cylinder made of tin foil was capable of playing back recorded sound. Since his time many improvements have been made in sound recordings. To date 4 various record types have been established. The important factor in each is the disc (or record) rotation per minute which range from 78 RPM, to 33 1/3 RPM, to 45 RPM, to 16 2/3 RPM. This 16 2/3 RPM is known as the story book type and is primarily used for blind or handicapped persons. Reel to reel and cassett tape recorders are used in schools at all grade levels. In laboratory and learning center situations ear phones are used with both tape and record players to assure privacy for the student using the equipment.

Audiovisual education can be thought of as a "painless" form of learning. When used in proper proportions it can

avoid teacher and student frustration, [illegible] be thought provoking enough to challenge students at all levels of thinking.

Chapter III

PRESENTATION OF THE FINDINGS OF THE STUDY

This chapter presents the statistical data from the instruments mailed to the random population.

Mail returns. Once the surveys were returned, the responses were scored as a test on computerized answer sheets. The questions on the survey, for the purpose of this chapter, will be referred to as "items". A copy of the complete questionnaire can be found in Appendix A as well as a computer test scoring sheet.

Responses to items 2-9, 11-18, 21, 23, 25-32 were scored on an answer sheet as Yes (A) or no (B). Multiple choice (A, B, C, D) selections were made on items 1, 10, 19, 20, 22, and 24. Any item receiving no response at all was scored on E (except item 10 where E represented a specific response). The teacher's school and personal code were entered on the score sheet, as well as the grade taught. Any teacher teaching a 2 grade level class was considered as teaching the lower grade. The scored sheets were grouped according to grade taught, and mailed to Bloomington, Indiana Computer Center at IU.

The next section of this study will present in table forms the statistical results as derived by the computer print out sheets sent to this researcher.

Comments to items 9 will appear in Appendix B. Appendix C will give comments made to item 10-A. Appendix D will contain general comments made at the end of the questionnaire, and Appendix E will show the number of instruments returned as compared to Table 2.

Item 1 was designed to find out the majority of the teaching situations of the selected population. Which of the non-projected materials were produced most frequently is shown in Items 2-8. Table 3 shows that all respondents produced bulletin board materials, and the majority of the teachers are in self-contained one teacher classrooms. Of the responses, 75% or more at all grades produced subject area games or materials. Among the things listed in item 9 were "flannel board things", "charts", "maps", "self-directed art projects", and "books" (See Appendix B).

Table 3

Item 1 Represents the percentage of teachers in self-contained classrooms with one teacher. Items 2-8 give the percents of non-projected materials produced by grade level.

Item Grade	1	2	3	4	5	6
1. Self-contained with one teacher	96	93	82	93	86	67
2. Bulletin boards	100	100	100	100	100	100
3. Picture files	88	86	94	86	81	83
4. Dry mountings	48	36	35	57	43	50
5. Learning centers	92	79	41	71	52	72
6. 2x2 Slides	12	14	12	14	14	28
7. Overhead transparencies	60	43	41	42	57	78
8. Subject area games	92	100	94	78	81	94
9. Others	32	7	41	29	24	27

Item 10 represents one of the most important sections of the instrument. The amounts of time normally spent in production per week are shown in Table 4. The responses by grade level are in percentages. The table supports the assumption that upper grades (4, 5, 6) spend less time per week in preparation of AV aids than do teachers of grades 1 and 2. Only 3 to 6% of all respondents spend over 8 hours weekly in production.

Table 4

Item 10 Findings by grade of time spent weekly in production.

Hours Grade	1	2	3	4	5	6
0-2	40	57	35	79	71	67
2-5	20	29	23	14	24	33
5-8	16	-	-	7	-	-
8-10	12	7	-	-	-	-
over 10	12	7	12	-	5	-

Items 11-18 provided information about knowledge and use of projection equipment and AV preparation machines. The results are given by grade in Table 5. Of unanimous use at all grade levels was the film strip machine.

Table 5

Items 11-19. The percentages by grade of teachers responding yes to the use of these projection and preparation machines.

Grade	1	2	3	4	5	6
11. Dry mount press	44	29	35	57	57	61
12. Mineograph	76	64	71	64	81	89
13. Spirit Master	92	71	71	93	71	94
14. Slide projector	60	79	71	79	76	83
15. Overhead projector	92	86	94	93	100	89
16. Opaque projector	64	78	71	93	82	89
17. 16 mm projector	80	64	88	93	95	94
18. Film strip projector	100	100	100	100	100	100

Items 19-24 are shown on Table 6. The respondents were asked 1) if they knew of the classes offered at IUSB or by the SBCSC, 2) had taken either class, or 3) had no knowledge of either class. It is shown that 60% knew of the classes, but had not taken it, as compared to less than 35% who did not know of either class. The table shows percents of all respondents.

Table 6

Item 19-24 Knowledge of production classes concerned in this study and possitle enrollment dates if respondent was interested in one or both courses.

	IUSB (F400/500)	Inservice (SBCSC)
Knew of class and have taken it	5	11
Knew of class but haven't taken it	61	60
Didn't know of class	34	31
May enroll - YES	6	29
Summer 1976	4	-
Fall 1976	0	22
Spring 1977	2	7
Summer 1977	-	-

When these percentages are transferred to actual numbers of respondents, it can be projected that 4 people may enroll at IUSB in the Summer (1976) and 2 people in the Spring (1977) for F400/500. Twenty people may enroll in the Fall (1976) Inservice class, and 8 people in the Spring (1977). It was indicated by 5 respondents that there is a class

similar to these offered at Bethel College, South Bend, which they have taken.

Items 25-32 were included to discover which coordinators of special instruction in the SBCSC were known and to what extent their services have been used. The figures in Table 7 show that all coordinators are known by 50% or more of this research population.

The percentage distribution is fairly even throughout the grades. However, it appears that the second grade teachers know of and/or utilize the coordinators more than the other five grades. Mr. Kenneth Geoffroy of the Music Dept. edged the other coordinators by a small margin to be the most popular person on this list. The column showing the over all percentages is the total number of respondents at all grades.

Of the 109 respondents to this survey 54 requested a copy of the results.

Table 7

Items 25-32 Instructional Coordinators for the SBCSC and the percentages by grade and over all of respondents that know of and/or have requested their assistance.

Grade	1	2	3	4	5	6	overall
Audiovisual -	80	86	71	71	70	78	74
Music -	88	93	88	86	71	83	84
Art -	84	93	76	86	71	78	81
Language Arts -	52	86	76	71	58	72	67
Mathematics -	84	93	82	71	70	83	81
Reading -	56	70	71	79	59	72	64
Science & Health -	84	100	82	79	53	67	75
Social Studies -	85	100	76	64	65	72	73

Chapter IV

SUMMARY, FINDINGS AND CONCLUSIONS

The final portions of this study contains general summary statements about the design and function of the study, overall statements about the findings, and final conclusing statements. Following the conclusion there are some recommendations for future follow-up studies.

Summary

The problem. The purpose of this study was twofold. First, it was designed to find an average length of time spent by South Bend Community School Corporation teachers in classroom visual aid preparation, and secondly, to find out whether area teachers knew of the instructional courses available to them in audiovisual aid production.

Methodology. A normative survey of 32 items was prepared and sent to 30% of the teachers grades 1 to 6 in each elementary school in the SBCSC. Each school building and teacher received a code number and this code appeared on the upper right hand corner of the questionnaire. This researcher kept a record of all surveys mailed, received and all follow-up letters mailed and received by using this code to identify respondents.

A cover letter stating the purpose of the study, the survey instrument, and a self-addressed envelope to this researcher was sent to the random sample population through the SBCSC inter-school mail system.

All completed surveys that were returned were scored as a test on computer answer sheets and sent to Indiana University, Bloomington, Ind. for analysis. Appendix E gives the number of teachers surveyed by grade level, and the total number responding to the questionnaire (also listed by grade level).

Findings

Of the 140 persons randomly selected for this study 109 responded promptly or after receiving follow-up letters. The following statistical analysis can be considered conclusive for the population surveyed.

1. In the area of non-projected AV materials, it was found that bulletin board preparation is the one area most common to the teachers grades 1 thru 6. The least frequently prepared aid among the respondents was the 2x2 slide. More than 75% of these teachers reportedly prepared subject area games and collected picture file materials.

2. It was stated in the assumptions about this problem that a considerable amount of time would be spent by the respondents outside the classroom preparing classroom aids. As a result of this survey it was learned that 61% of the teachers spent 0 to 2 hours in such preparation, 24% spent

2 to 5 hours, 5% spent 5 to 8 hours, and only 10% spent more than 8 hours. This is a reversal of what was expected. This researcher failed to anticipate one very important variable in the design of this study. That variable was the number of years of teaching experience the respondent has had. Several teachers added a note on their surveys saying they no longer needed to spend hours preparing materials since they have "acquired", "accumulated", "already made" and "collected" materials "over the years"!! Also, several indicated that they prepared the majority of their materials during the summer months.

However the assumption was supported by the statistical data in Table 4 that teachers of grades 1 and 2 do over all spend more time in production than do grade 5 and 6 teachers.

3. The most popular AV machine used by those surveyed was the film sprip machine. Ranking close seconds by the respondents were the use of the 16 mm movie projector and the overhead projector with 87% and 93%, respectively.

4. In regard to the production class (F400/500) offered at IUSB, although only 5% have taken the class, 61% knew of it but have not taken it, and 63% of all responding indicated they would not be interested in the class. It should be noted here that 5 people indicated on their survey instrument that they had taken a class similar to this at Bethel College, South Bend.

Of the surveyed population, 11% have taken the Inservice course sponsored by the SBCSC, 31% did not know of it, and 60% of the respondents knew of the course but have not taken it. Fifty-three percent of the teachers indicated no interest in this class.

There is no indication that there will be any significant enrollment increase as a result of this survey in either of the above courses. Twenty persons may enroll in the Fall 1976 session and 8 in the Spring 1977 session of the Inservice class. The course at IUSB had only 2 or 4 prospective students indicated in this questionnaire for Summer (1976) and Spring (1977) respectively.

5. At least 50% or more of the random population used have requested and most indicated they received assistance from Instructional Coordinators in the SBCSC. The percentage of coordinators known was from 64% to 84% of the respondent population. Gradewise, Table 7 shows that 70-100 percent of the 2nd grade teachers have contacted all coordinators.

Conclusions

Based upon the original problems of this study 3 conclusions can be made.

1. Teachers do spend hours outside the classroom preparing classroom aids. Not as much time is used as was projected because, as the respondents indicated, 1) time is spent during the summer months producing the aids and 2) with more years of teaching experience, less time is

needed for production, since materials have been prepared, collected, and acquired over the years. However, there were some statistical indications that teachers of grades 1 and 2 spend a wider range of time in AV production than do 5th and 6th grade teachers.

2. Although not many of the surveyed population have taken the AV production class offered at IUSB or the SBCSC Inservice course, over 60% are aware of their existance. The majority are also aware of and have received assistance from Instructional Coordinators for the SBCSC. With very few exceptions, the responses were positive toward and favorable about the help the teachers received from the coordinators.

Recommendations for further study. In view of the findings concerning time used in classroom aid production, a further study with an expanded population of 50% to 70% teaching population, and an included years of experience variable, would be interesting.

Open and closed classrooms as well as departmentalized teaching situations could be compared in respect to teacher produced materials. Although teachers of various teaching situations were used in this study, no conclusions could be made due to the design of the survey instrument and method of tabulation.

Many teachers produce their classroom aids, and many are aware of Free and Inexpensive Materials available to

them for immediate use. It might be interesting to survey teachers comparing those who have to those who haven't taken advantage of Free and Inexpensive Material Catalogs for classroom use.

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Appendix A

Cover letter and Questionnaire
and Sample computer sheet

33

* Haven't heard from you yet

Dear Teachers,

To stimulate and motivate your children, you probably spend much time outside the classroom preparing visual aides. Please take a few minutes to complete the following survey. It is a research project designed to find out how much time teachers of grades 1 to 6 use in outside efforts. Also, there will be questions concerning school services and production classes offered here in South Bend to assist teachers in their classrooms. The few minutes you take to complete and return this questionnaire will be very valuable to the project, and will be appreciated.

There is a return envelope enclosed. Please use the mail pouch in your school office for returning this questionnaire by school mail.

A copy of the results of this study will be sent to you if you indicate so on that section of the questionnaire.

Respectfully,
Ellen L. Sayles
Ellen L. Sayles
Teacher

Approved by:
Howard Uhrig
Howard Uhrig
S.B.C.S.C.
Audio-visual Coordinator

* Included on all follow-up cover letters.

Teacher Made Classroom Aides

No. _____
(For office use only)

What grade do you teach? 1__2__3__4__5__6__7__8__

1. What type of teaching situation are you in?

a. 1 Self contained (one teacher)
b. 1 Self contained (team teaching)
c. 1 Open classroom (team teaching)
d. 1 Open classroom (one teacher)

Do you ever personally produce or collect materials for any of the following for your classroom? Please check.

yes-a
no-b

2. 2. bulletin boards
3. 3. picture files
4. 4. dry mountings
5. 5. learning centers
6. ____ 2x2 slides
7. ____ over head transparentcies
8. ____ subject area games (reading, science, math, etc.)

What other visual aides do you produce for your room? 9. _____

9. Response - A no Response - B

10. How much time per week do you normally spend making aides? 10.

a. ____ 0-2 hours or approx. 1 evening
b. ____ 2-5 hours or approx. 2 evenings
c. ____ 5-8 hours or approx. 2to 3 evenings
d. ____ 8-10 hours or approx. 3 to 4 evenings
e. ____ over 10 hours

Which items above take the most time to make? 10-A

10-A

Have you ever used any of the following school equipment? (a)- yes (b)- no

11. 11 dry mount press
12. 12 memepgraph machine
13. 13 spirit master machine
14. 14 slide projector
15. ____ over head
16. ____ opaque projector
17. ____ 16 mm projector
18. ____ film strip projector

Did you know I.U.S.B. offers a class in classroom material production? (F400/500) 19

19. (a) ____ Yes, I've taken it
(b) ____ Yes, but I haven't taken it
(c) ____ No, I didn't know about it

Did you know there is an Inservice class offered in classroom materials through the South Bend Community School Corporation? 20

20. (a) ____ Yes, I've taken it
(b) ____ Yes, but I haven't taken it
(c) ____ No, I didn"t know about it

Would you be interested in either class? If yes, please indicate when you might consider enrolling (if within the next year).

21. I.U.S.B. (a) Yes ____ (b) No 21.

22. Summer Session 1976 (a)
Fall 1976 (b)
Spring 1977 (c)
Summer 1977 (d)
No Response (e)
} 22

23. Inservice Class (a) Yes ____ (b) No ____

24. Fall 1976 (a)
Spring 1977 (b)
No Response (c)

Have you requested the assistance of any of the following S.B.C.SC. Coordinators in preparing classroom aides or projects? If no, please check the blank. If yes, please comment on the type of help you received.

25. AUDIOVISUAL - (a) No ___ (b) Yes ___ (c) No Response
25.

26. MUSIC - (a) No ___ (b) Yes ___ c no Response
26.

27. ART - (a) No ___ (b) Yes ___ c no Response
27.

28. LANGUAGE ARTS - (a) No ___ (b) Yes ___ c no Response
28.

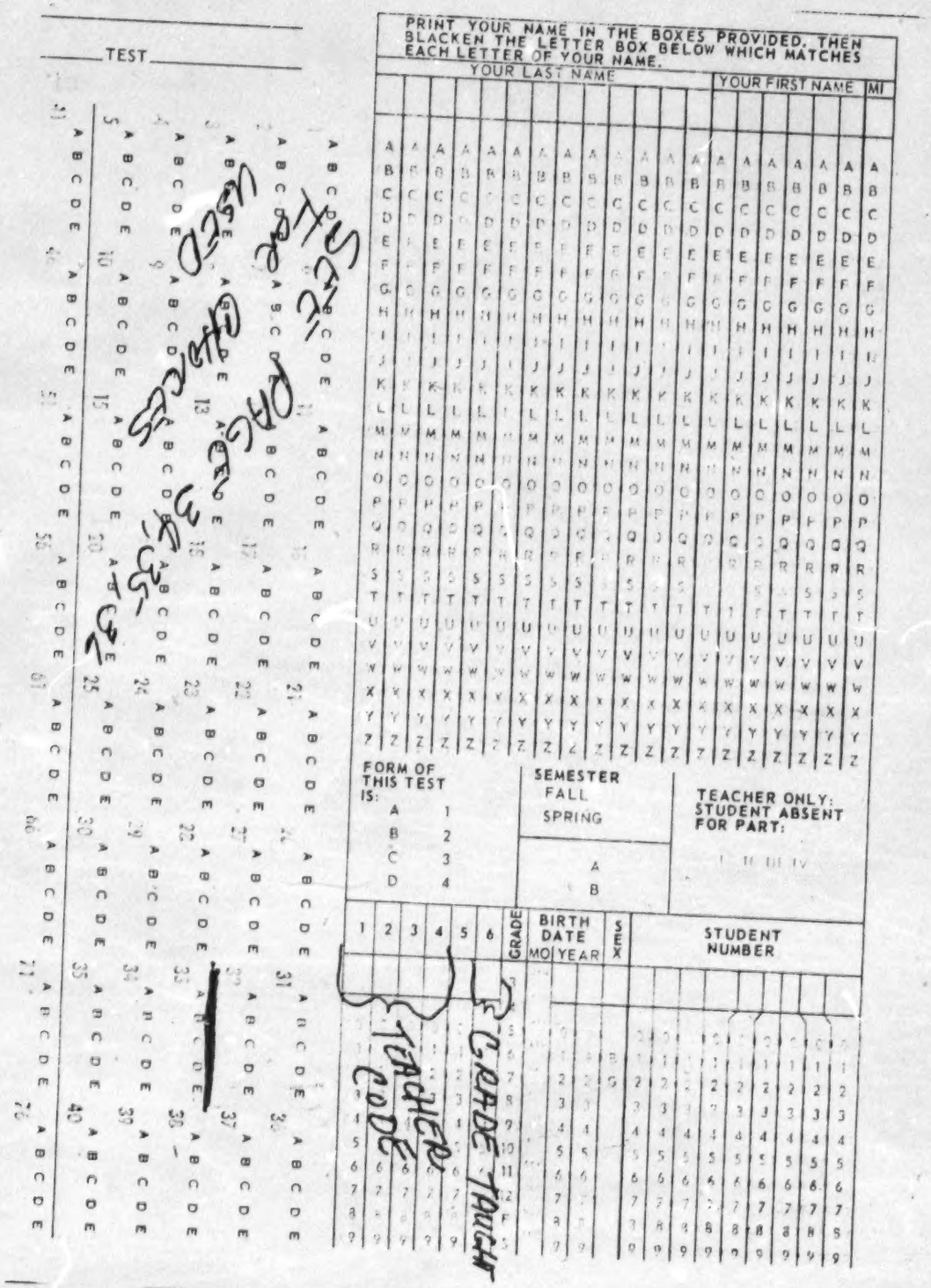
29. MATHEMATICS - (a) No ___ (b) Yes ___ c no Response
29.

30. READING - (a) No ___ (b) Yes ___ c no Response
30.

31. SCIENCE AND HEALTH - (a) No ___ (b) Yes ___ (c) No Response
31. c)

32. SOCIAL STUDIES - (a) No ___ (b) Yes ___ (c) No Response
32.

Would you like a copy of the results of this survey? No ___ Yes ___
If yes, please self-address the mailing lable below.
Do you have any general comments or suggestions about teacher produced classroom aides, or the instructional services offered to teachers? _____


TEST
PRINT YOUR NAME IN THE BOXES PROVIDED. THEN BLACKEN THE LETTER BOX BELOW WHICH MATCHES EACH LETTER OF YOUR NAME.
YOUR LAST NAME
YOUR FIRST NAME
MI
FORM OF THIS TEST IS:
A 1
B 2
C 3
D 4
SEMESTER
FALL
SPRING
A
B
TEACHER ONLY: STUDENT ABSENT FOR PART:
1 2 3 4 5 6
GRADE
BIRTH DATE
MO
YEAR
SEX
STUDENT NUMBER
TEACHER CODE
GRADE TAUGHT
Test Changes Used Effective 1987-88

Appendix B

Item 9 - Responses to question of what other visual aids the teacher produces.* (Numbers in parenthesis are individual codes assigned to respondents for this study).

(1108)	charts, maps
(2201)	self directed art projects
(2200)	charts for all subjects
(2901)	books
(1706)	mimeograph masters (all subjects)
(1111)	charts, learning center materials, games, clocks, manipulative devices, a Bat Cave and a Tree House.
(2709)	posters, banners
(1609)	reading, spelling, English, and arithmetic charts
(2207)	movies, tapes
(0507)	explanatory charts, achievement charts
(0204)	posters, charts
(0718)	Social Studies units and projects
(1419)	tapes
(2818)	Displays of objects under discussion
(1617)	Posters, charts, graphs, etc.
(1219)	Microscopic slides, posters
(3119)	Phonics visual aids and games
(2211)	Embellishment for science, social studies - Projects with mounting, i.e. leaves and words on burlap
(0909)	filmstrips for arithematic
(1601)	visual aids for stories in reader
(0600)	some phonics picture cards
(0503)	word cards, ditto masters
(2801)	play props, puppet masks -play masks
(1801)	flash cards, number cards
(1701)	Any I use
(3302)	Flannel board materials
(0511)	Charts, murals
(1113)	Greenhouse, play backgrounds

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*These are partial listings of comments. Any duplicates of one or two materials which have already been mentioned above were omitted.

Appendix C

Item 10-A - Responses to question of which aids require the most time to produce.* The numbers in parenthesis are individual codes assigned to respondents for this study.

(0601) games, learning centers, bulletin boards
(2200) learning centers and subject area games
(1206) picture files - dry mount
(0603) learning centers; subject games
(0711) learning centers, dry mountings, bulletin boards
(1106) bulletin boards and games for reading and math
(3108) All are equally time consuming
(1706) Mimeograph masters, bulletin boards
(0508) It varies with the project
(2207) overhead transparencies, bulletin boards
(1707) charts, bulletin boards, overhead transparencies
(2104) bulletin boards, subject area games, learning centers
(0804) bulletin boards, and picture files
(0903) subject area games in reading and math
(0718) Social Studies Units
(0720) overhead transparencies and subject area games
(2211) Special science or S. S. projects for bulletin boards or learning center
(3305) picture files
(2407) overhead transparencies, slides
(0700) reading, science and math
(2801) Bulletin boards take for ever to put up.
(3000) Picture files, bulletin boards, games

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*These are partial listings of comments. Any duplicates of one or two materials which have already been mentioned above were omitted.

Appendix D

The following responses were made at the conclusion of the survey. The respondents were asked to make any general comments or suggestions about teacher produced classroom aids, and the instructional services offered to teachers.

Develop a center to help with suggestion. Make this an In-Service Day. (0601)

We need more school day time or parent (para-professionals) assistance. It would be very beneficial to have at least ½ day a month for elementary teachers to work in their classroom. Planning periods have been a boost this year but not the final answer. (0711)

I think teachers have the impression that coordinators will come to <u>them</u>. I think when word gets around that they can be called upon for help, the expertise of our coordinators will be used more to everyone's satisfaction! I think too, that teachers should be given more of an allotment for materials for the classroom. Even if we make them ourselves, the materials to make them are expensive. Also, I wish we could purchase things from the school corporation, e.g. I was told that we were really getting low on ditto masters and it was suggested that I not use as many. When I asked if I could purchase a box from the school corp. I was told there's no way to do that so I had to purchase them from a business store downtown at, I'm sure, a higher price than the school corp. pays! (1706)

More workshops for teachers during school time to give ideas and to give them an opportunity to make AV material - also the supplies should available for free. (1111)

In 11 years of teaching I've accumulated many aides - this explains the short time weekly spent on making them. (1707)

Services offered to teachers certainly needs to be made known to teachers, particularly those new to the system. (2401)

Need released time to make aids for our class room use. (0903)

I feel that it would be extremely beneficial to use our inservice days next year or our professional days in the fall to construct learning centers and aids for our classroom. This would be of direct benefit to our children. Dr. D. Cooper of Ball State would make a good program director for this as he has hundreds of these centers to demonstrate to inspire us. (1202)

Most classroom aides all up to the teacher, depending on what kind of job he wishes to do. Time spent on these projects is dependent on this also. (0204)

Most of the above people are almost never seen at inner city schools. (3017)

I know which services are offered and I feel that they are adequate. I hope they will continue to offer these services in case of future need. (0521)

Teacher produced aides seem to be much more satisfactory teaching devices than most of the commercial aides. They are more economical, and a greater variety can be used to suit the curriculum and needs of your changing classes. (2319)

My situation is unique, I believe - I am married to Don Chiszar who is an administrative assistant in Mishawaka Schools and is on AV - (All Media) - Specialist!!! Naturally, I have been indoctrinated and also helped in all media areas by my husband! (2115)

Not sufficient planning time to recommend materials or prepare visual aids, etc. (1615)

Not enough hours in the day to keep up with this. These activities come after the lesson plans, the teaching, and the grading of papers (unfortunately). (2909)

For Bulletin Boards - have resorted mainly to bought materials because of time involved. Felt time should be spent more constructively. But, this proves awfully expensive! (2500)

Materials to use with L. D. students. (1900)

I believe it would be an excellent service for all SBSSC teachers. (0600)

I feel more instructional services offered to the teacher would be of great help. (0700)

I feel that all dem. teachers should know how to operate the projector and also have access to use it not just some use it all the time. (1107)

Takes a lot of time. Do not last long enough for the time it takes to make them. Children who need the aids most, do not work independently and it is hard to find the time to follow up on their work and results. (0609)

A teacher produced classroom aides course should be on the required list at teacher training universities. (3010)

Appendix E

Grade distribution of teachers selected by stratified random sampling for this study, and the number of questionnaires returned per grade.

Grade	Number Selected	Number Responding
1	26	25
2	20	14
1-2	1 (included in grade 1 results)	
3	19	17
4	19	14
3-4	1 (included in grade 3 results)	
5	32	21
4-5	1 (included in grade 4 results)	
6	22	18
Total	140	109